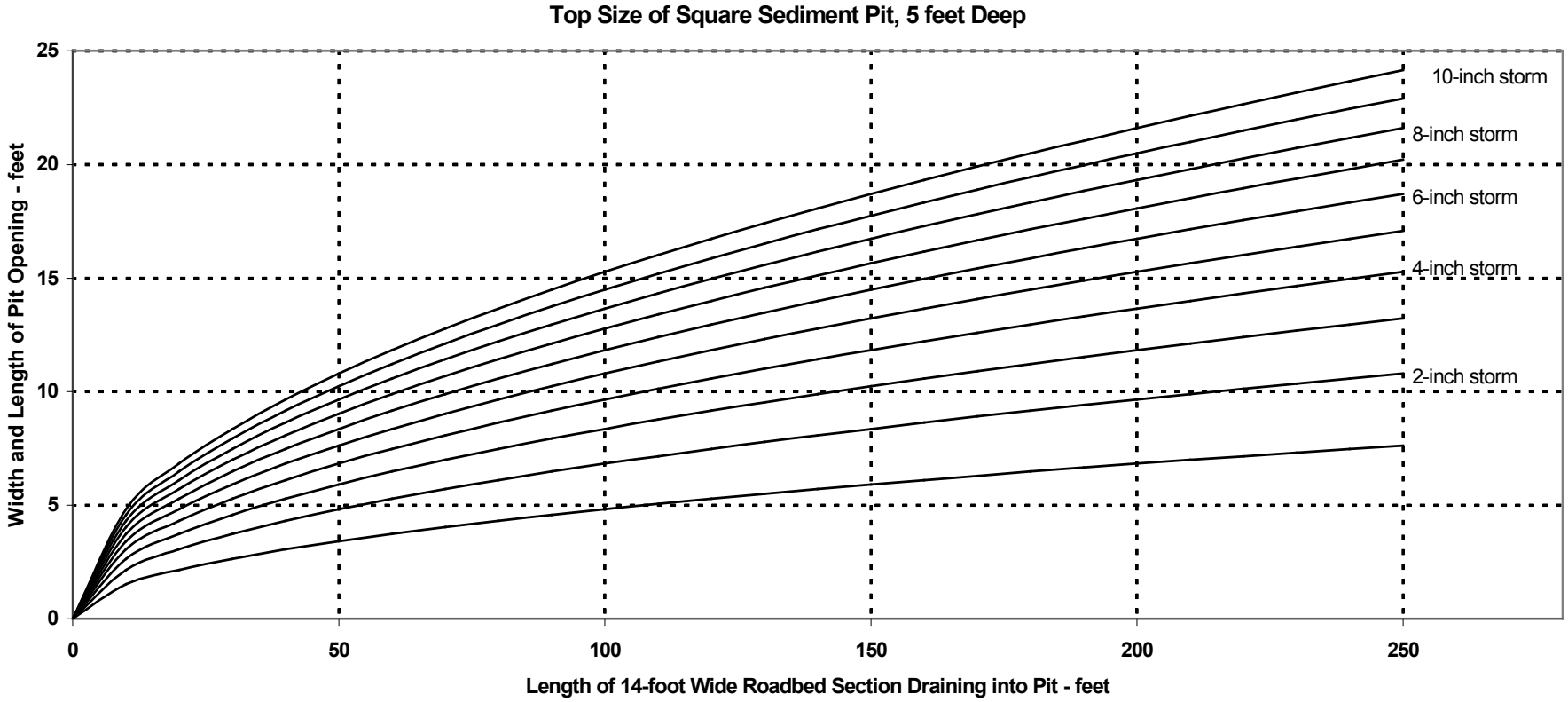
Appendix 14: Estimating Sizes of Sediment Traps and Pits



The graph above estimates the area size dimensions of a sediment pit that can hold the water of storm runoff from a 14-foot wide roadway.

How to read the graph: If you have a 50-foot long stretch of roadbed that is 14-feet wide, and you wish to capture a "4-inch storm" volume, you would need a sediment pit with dimensions of ***at least*** 5 feet deep x 7 feet wide x 7 feet long.

The calculations used to create this graph make the following assumptions, which may or may not apply to your forestry application:

- The sediment pit is 5 feet deep and the roadbed is 14-feet wide;
- The roadbed and inside ditchline are nearly impervious and all runoff from the road section enters the pit;
- No allowance is provided for deposited sediment that may be included within the storm's water runoff. A larger dimension pit would be needed to accommodate the water runoff *and* sediment.

Source: Dr. Lloyd W. Swift, Jr. (ret.) Coweeta Hydrologic Laboratory, Southern Research Station, USDA-Forest Service. 2006.